

CURRENT LISTING OF CLAIMS:

1. (Original) A radio-capable device, comprising:
a data collection unit for collecting data, and having a normal operating mode, in which it is enabled for collecting data, and a low-power mode; a radio communication unit for transmitting over a radio channel data collected by the data collection unit; and
a radio channel sensor coupled to the radio communication unit for sensing at least one physical characteristic of the radio channel, and arranged to cause the data collection unit to enter the normal operating mode if the physical characteristic meets a pre-set threshold.
2. (Original) A radio-capable device as claimed in claim 1, wherein the radio channel sensor is arranged to sense the said characteristic by means of at least one antenna of the radio communication unit.
3. (Previously presented) A radio-capable device as claimed in claim 1, wherein the data collection unit is capable of collecting user inputs.
4. (Original) A radio-capable device as claimed in claim 3, wherein the data collection unit comprises an optical sensor for sensing movement of the device relative to a surface external to the device.
5. (Original) A radio-capable device as claimed in claim 4, wherein the optical sensor is fully or partially disabled in the low-power mode.
6. (Previously presented) A radio-capable device as claimed in claim 3, wherein the device is a mouse or a trackball.
7. (Previously presented) A radio-capable device as claimed in claim 1, wherein the physical characteristic is the tendency of the channel to return to the radio communication unit radio signals transmitted by the radio communication unit.

8. (Previously presented) A radio-capable device as claimed in claim 1, wherein the physical characteristic is one or more of reflection of radio signals transmitted by the device, absorption of signals transmitted to or by the device, and de-tuning of one or more antennas of the device.

9. (Previously presented) A radio-capable device as claimed in claim 7, wherein the radio communication unit comprises a transmitter and a receiver which share an antenna and the radio channel sensor is arranged to sense the level of signals transmitted by the transmitter that are received by the receiver.

10. (Previously presented) A radio-capable device as claimed in claim 7, wherein the radio communication unit comprises a transmitter having a first antenna and a receiver having a second antenna and the radio channel sensor is arranged to sense the level of signals transmitted by the transmitter that are received by the receiver.

11. (Previously presented) A radio-capable device as claimed in claim 9, wherein the characteristic is a change in the sensed level.

12. (Original) A radio-capable device as claimed in claim 11, wherein the characteristic is a change in the sensed level of greater than a pre-set amount in a pre-set time.

13. (Previously presented) A radio-capable device as claimed in claim 1, wherein the device is a wireless device.

14. (Previously presented) A radio-capable device as claimed in claim 1, wherein the device is powered by a battery.

15. (Previously presented) A radio-capable device, comprising:
a data collection unit for collecting data, and having a normal operating mode in which it is enabled for collecting data, and a low-power mode;
a radio communication unit for transmitting over a radio channel data collected by the data collection unit; and
a radio channel sensor coupled to the radio communication unit for sensing a change in at least one physical characteristic of the radio channel that is indicative of use of the device by a user, and arranged to cause the data collection unit to enter the normal operating mode from the low-power mode upon sensing of said change.

16. (Previously presented) A radio-capable device as set forth in claim 15, wherein said change in at least one physical characteristic comprises a change in received signal level.

17. (Previously presented) A radio-capable device as set forth in claim 15, wherein said change in at least one physical characteristic comprises a change in received signal level by more than a predetermined amount.

18. (Previously presented) A radio-capable device as set forth in claim 15, wherein said change in at least one physical characteristic comprises a change in received signal level by more than a predetermined amount within a predetermined time.

19. (Previously presented) A radio-capable device as set forth in claim 15, wherein said radio channel sensor further controls said radio communication unit to transmit dummy signals over said radio channel when said device is in said low-power mode.

20. (Previously presented) A wireless device having a normal operational mode and a low-power standby mode, comprising:

a transceiver capable of transmitting and receiving signals over a wireless communication channel; and

a wireless communication channel sensor coupled to the transceiver for sensing a change in at least one physical characteristic of signals received over the wireless channel that is indicative of use of the device by a user, and arranged to cause the wireless device to enter the normal operational mode from the low-power mode upon sensing of said change.